

IN THE SENATE OF THE UNITED STATES.

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Mr. HUNTER made the following

REPORT:

[To accompany bill S. No. 271.]

*The Committee on Finance, to whom was referred the report of the Secretary of the Treasury, have considered so much of the same as relates to a change in the coinage, and respectfully submit the following views:*

The subject is one of great importance and much difficulty, for it involves more or less all the questions connected with the metallic currency of the country. On the one hand we have seen the rapid disappearance of our silver currency, and the certain consequence of that loss, a flood of small bank notes; and on the other we have the natural, and to some extent the well-founded, apprehensions as to the danger of tampering at all with the standard of value. Among those even who believe that there is a necessity for some legislation on the subject of our coinage, there is a difference as to the precise measure to be adopted. Some are of opinion that only one of the precious metals should be used as the legal standard; and these, again, differ as to which shall be selected. Others think that the double standard should be preserved, but recommend a different legal ratio to be established between the two metals, according as the silver coins are large or small. These views have all been examined by the committee, as far as their time and means of information permitted. And first, as to the danger of accommodating the legal standard to the increasing quantity of gold, which many seem to think may swell the volume of currency so rapidly as to disturb not only all the settlements of property made for long periods of time, but to affect seriously all the pecuniary transactions of society. To ascertain what may be the probable effect of the additions to the stock of precious metals in the world, which have been made so rapidly of late, it will be necessary to see in what manner and to what extent their capacities as a standard of value have been affected by changes which have been made in their relative proportions to the property of the world.

If there were no other money but gold and silver, and if contracts were made, not according to arbitrary values assigned by legislation to given portions of them, but were measured by certain weights of fine gold or silver, then these metals would fluctuate precisely according to natural laws; that is to say, according to the proportion which they bore to the residue of the property of the world. A contract might be measured in specie by a law

of its own; that is to say, it might specify that it was to be paid in such a weight of gold or in such a weight of silver, and this arbitrary rule might differ a little from its real value as bullion; but in the general, the great mass of transactions would be measured in these metals nearly according to their true bullion value; that is to say, their currency and their bullion values would correspond. If the stock of bullion in the world increased in the same ratio with the property of the world, the standard of value would be invariable; if more slowly, it would appreciate; if more rapidly, it would depreciate. But still the natural laws of trade would lead to constant efforts to produce an equilibrium: if they grew dearer, more of these metals would be raised; if cheaper, less labor would be employed in producing them; and although there might be periods when the true equilibrium could not be preserved, still the tendency would be that way. At any rate, the relative values of the two metals, gold and silver, would be regulated by the laws of trade, and contracts would be measured by those metals within a reasonable degree of approximation to the true proportions. If now, however, the governments of the world should interfere and enact that a certain quantity (say fifteen ounces) of silver should be equal to one of gold, it would become more difficult to trace the laws which would then regulate the compound standard. These metals derive their value from two distinct sources—one from their use as a currency, the other from their application to manufacturing purposes. The demand for them as currency in any given year is to be measured by the number and amount of exchanges to be made in specie during that year—their value for mechanical uses is their bullion value; that is to say, it is measured by their proportion to the residue of the property of the world, for the demand for them in the arts will be very nearly in proportion to the wealth of society. When this regulation of law takes effect, these two values may differ by sensible limits. If, in the instance cited, any extraordinary cause should increase the relative supply of gold, then the bullion value of fifteen ounces of silver would be greater than one ounce of gold. The demand for the precious metals to be used in the arts would play upon the silver, and it would be directed to such purposes until the decrease of currency and the increase of plate had again equalized the currency and the bullion values. But in such a case it would be clear that this artificial regulation had prevented the currency of the world from increasing with the supplies up to the natural rate of bullion, and had forced some of it into manufactures which otherwise would have gone into coin.

The great point of preserving a precise equality between the bullion and currency values of the precious metals would now, to some extent, be lost. Still the deviations might not be enough to lead to very serious consequences. It will still simplify the inquiry beyond the real state of the case if we continue to suppose that gold and silver are the only money of the world. But to approach still nearer to the real state of things, we now take the case of a difference in the ratio of gold to silver, as established in different countries. Instead of a common legal proportion of fifteen to one, we will now suppose that some nations adopt that ratio—others, that of fourteen to one—and that others, again, use only one metal as a standard, some preferring silver and others gold; and here, again, we will suppose an extraordinary increase in the supply of gold; the bullion price of silver now rises to fourteen to one: how will these different countries be affected? As a currency, silver will leave that in which its ratio is fixed to fifteen to

one of gold, and gold will there replace it; it will still be seen as a currency where its legal rate is fourteen to one, and it will be used as bullion every where until the increased quantities bring down its bullion to its currency-value, taking the world together. But how will the first country be affected? It will purchase the gold to replace the silver, at a loss; that is to say, it will not get gold enough in exchange for its silver; and it must be remembered that this loss is sustained on far the largest value which it had invested in coin, because, where both circulate freely, the silver probably appears in so much greater quantities as to be more valuable. It seems that for fifty years, from 1750 to 1800, (see Doc. No. 117, p. 50, 1st sess. 21st Cong.) the quantity of silver raised was to that of gold as *forty* to *one*: and yet, during that period, the value of gold was not more than fifteen times as great as that of silver. As a further proof of the greater quantity of coined silver, we find that the value of the silver, as compared with gold coin, was, in France, from 1803 to 1840, nearly as three to four; and in the United States, from 1793 to 1841, was nearly as two to one; and in Great Britain, where gold was the exclusive legal standard, silver being used only for the smaller transactions of trade, the proportion of silver was more than one to six. So that there can be little doubt of the large excess in value of the silver coin, as compared with gold. (See table A.) Indeed, it appears from a carefully compiled table, appended to Mr. Ingham's report, (Doc. No. 117, p. 101,) that, from 1492 to 1825, there were coined from the American mines \$4,310,000,000 in silver, and only \$1,890,000,000 in gold. But, in tracing the effect of this change of the relative value upon particular countries, we must not forget its operation upon the rest of the world. In thus excluding one of these metals from one country, if its property and trade were large, and in thus forcing more than its natural proportion into manufactures, we should diminish the volume of specie currency of the world below the natural supply. How this would affect mankind will be hereafter examined. But the mischief would be great indeed if all the world were to adopt but one of the precious metals as the standard of value. To adopt gold alone, would diminish the specie currency more than one-half; and the reduction the other way, should silver be taken as the only standard, would be large enough to prove highly disastrous to the human race. Indeed, a reference to the history of the precious metals, and the general course of human production, can scarcely fail to convince us that there has been a constant tendency to appreciate their value, as compared with the residue of the property of the world, and that every extraordinary increase of the supply of the precious metals, of which we have any account, has exercised a highly beneficial effect upon human affairs. When contracts are made by a standard which is gradually contracting, the advantages are on the side of capital, as against labor, and productive energy is cramped by receiving less than a fair share of the profit of its enterprises. Before the invention of substitutes for payments in coin, and before the increased supply of specie from the discovery of America, human history is full of the strifes between debtor and creditor, and human legislation is rife with experiments to limit the encroaching and engrossing power of capital.

The most ancient legislation of which we have authentic accounts, extinguished all debts in every seventh year. Interest was often prohibited, and generally regarded with abhorrence; for although the reason was not perceived, yet the fact was felt, that capital received profit enough for its sue

in the appreciation of the standard of value. Up to a recent period, the debasement of coin has been practised in all countries. The English pound, which in the days of William the Conqueror contained a pound weight of silver, contains now 3oz. 12dwt. 16gr. The French livre, whose original weight would now be worth \$18 16, is so reduced as to be worth only 18,<sup>478</sup>/<sub>1000</sub> cents. Such are the effects which would have naturally flowed from a constant tendency towards contraction in the standard of value upon which contracts were based. The attempts which were made to relieve these evils were unskilful, and often mischievous; but these expedients were sometimes called for by the necessities of the times, and were the evidences, if not the remedies, for mischiefs actually endured. To have prevented the contraction of the specie standard of value, it was necessary that the precious metals should have increased as fast as the residue of the property of the world; but we know that before the discovery of America, the annual supply of the precious metals was very small, whilst it is notorious that capital and property accumulate rapidly in times of profound peace. That this must be so, becomes still more evident when we trace the history of the precious metals since the discovery of America, and during a period when we have better means for ascertaining facts in relation to the relative progress of specie and property. That capital has increased with great rapidity, even in the last two centuries, although there were long periods of wasteful warfare in both, there is abundant evidence. Since the time of William of Orange, capital in Great Britain, and perhaps in Europe generally, must have doubled; for the rate of interest, notwithstanding the increasing demand for capital from increasing population, has diminished nearly one-half. The legal rate of interest in England during that reign was *eight* per cent., and money may now be borrowed for one-half of that rate, or less. The immense impulse which has been given by discoveries to the productive power, not only of man, but of material agencies, has increased vastly the property of the world. But for the last century the increase of the precious metals has been comparatively slow. The amount produced annually cannot be accurately ascertained for any period of time, but a statement made by Brogniart of the production of the precious metals (see Doc. No. 117, p. 99,) from 1790 to 1802, places it at \$45,585,241. The entire production from the mines of America from 1492 to 1825, (see same Doc., p. 101,) according to a table compiled from the statements of Humboldt and Ward, amount to \$6,200,000,000. The quantity existing in the world at the time of the discovery of America, and that added from other sources since that period, are to a great degree conjectural, but it is probably not under \$8,000,000,000. (See table E.) Now if \$45,500,000 be taken as the average annual product during the last century—and doubtless until within the last ten years this estimate is sufficiently large—and if we deduct for the annual abrasion and waste \$10,000,000, (and Humboldt computes for the waste in plate alone in Europe, \$4,500,000—see same Doc., p. 70,) then the average annual addition to the stock of specie was not quite one-half of one per cent. Indeed this addition is probably over-estimated here, for Mr. Gallatin estimated the annual supply from 1809 to 1829, at \$18,000,000 in silver, and \$9,000,000 in gold, making but \$27,000,000 in all. Who can suppose but that property has increased at a far more rapid rate? Population has certainly increased at a much more rapid rate than one-half per cent. annually, (see table F,) and we shall hereafter show that the property of the world has grown faster than its population. In

1846, the ascertained public debt of Europe alone was \$8,170,345,607, (see Statistical Companion, by Barfield and Weld, pages 23 and 24;) and all must admit that this constitutes but a small portion of the capital in those countries, even if we apply the term only to those products in which labor enters as an element. When we consider how small a portion of the capital of the world is invested in public debt, we may form some conjecture as to the vast amount of commodities which measure the value of the specie of the world. That this stock is increasing much faster than that of the precious metals, is also highly probable. If, notwithstanding the increased demand for capital which an increased population produces, there is a fall in the rate of interest, there is reason to presume that the increase of capital is faster than that of population; that is to say, unless extraordinary circumstances have occurred to produce a greater relative waste, either of population or capital. But the period between 1800 and 1850 has not been marked by such circumstances. From 1801 to 1841, the population of Great Britain has increased from 10,942,646 to 18,720,394; and in the United States, from 1800 to 1850, the population has increased from 5,305,925 to 23,091,488; but during this period the rate of interest has greatly diminished. Now if capital had increased precisely in the same ratio with population, the interest would have been about the same now as in 1800; but this last having diminished, we have in that fact a proof that capital has increased faster than population.

If, then, we had possessed no currency but specie, and if our stock is about what has been estimated, it would have required a much larger annual supply of specie to have maintained the standard of value now as it was in 1800. But instead of that, the relative excess of property has been constantly increasing. How, then, can we fear that any supplies of the precious metals likely to be derived from California, or any mines now known, can affect injuriously the standard of value? The probable amount of specie raised annually does not now exceed \$150,000,000, (see table B,) which is a sum far below what would be necessary to keep up an invariable relation between the specie and the constantly increasing property of the world.

The effect of this contraction of the specie standard has been palliated by reductions in the amount of fine metal which was contained in coins of a given denomination. Less gold and silver were made from time to time to represent the same values; and although this made up to some extent for deficiencies in the production of the precious metals, yet its operation upon existing contracts, and especially those which required a long time for their fulfilment, must have had a depressing effect upon enterprise and production. The best matured schemes for profitable adventure might thus disappoint expectation, not because the calculation, so far as founded upon known data, was imperfect, but because of a contraction in the standard of value. What could be better calculated to discourage enterprise or depress the spring of human production? How much of the depression of commerce, during the middle ages, arose from the decline of prices consequent upon a diminution of the stock of precious metals, has probably never been sufficiently estimated. And yet a comparison between the deep decline of all the great interests connected with commerce and human industry during that period, and the wonderful impulse given to all sorts of productive enterprise after the discovery of the American mines, must suggest the effects which the existing state of the standard of value produced during the two

periods. But it may be asked why it is that this contraction of the standard of value has not been more seriously felt in modern times, if, in truth, the relative additions made to the stock of specie and property of the world were much larger in the latter than in the former case. If all the pecuniary transactions of society had been settled in currency, and there had been no currency but specie, there is reason to believe that the present state of things would give unmistakable evidences of the effects of a contraction of the currency upon our enterprise and industry. But since the general use of bills of exchange, currency has not constituted the only means of settling pecuniary transactions; and since the middle of the seventeenth century, when banks began to be felt in commercial affairs, specie has not constituted the only currency of the world; but this last has been so largely composed of paper, that we cannot omit its consideration in any question connected with our standard of value. Perhaps no discovery in the whole machinery of commerce has been more important to the world than that of the bill of exchange; none which saved so much labor in its processes; none which was so efficient in keeping up some approximation between the real and the money standards of value of the world. Accounts which formerly required a long, expensive, and hazardous transportation of the precious metals, began now to be settled by offsets, or an exchange of balances mutually due by distant bankers; and thus a mere transfer of entries upon their respective books, often saved the expense and the risk of the actual transportation of specie. The great facilities thus afforded, doubtless suggested the idea of the first banks which were established. The banks of Venice and Amsterdam were founded merely for purposes of exchange. A bank note was a certificate of a deposit of coin, or bullion, or an open letter of credit to that amount on the books of the bank. A credit thus established in the Bank of Amsterdam, when that city was one of the great centres of commerce, became more valuable sometimes to a London merchant, than the same amount in specie at home, because with it he could pay a debt in France or Italy, and save the expense and risk of transporting his money. It was not surprising, therefore, that such a bill should be worth more than the specie which it represented. To estimate the amount of pecuniary transactions settled at home and abroad by this system of exchange or offset, would be plainly impossible. But some idea may be formed of the vast extent to which it diminishes the demand for currency, if we consider the profit which a small part of this business pays, the number of persons whom it supports, and the immense amount of such transactions which individuals perform for themselves, since the machinery of commerce has improved so much, and steam and telegraphs have increased so greatly the facilities for intercourse and correspondence. But this is not the only mode in which paper has diminished the demand for the precious metals. Not only did the wholesome operations of the system of exchange dispense with the use of specie to a great extent, but another contrivance was made which is of more doubtful utility. The value of a paper founded upon an actual deposit of specie, suggested the idea of one based upon the supposed capacity of the maker to redeem it in specie whenever it was demanded. Governments lent their aid to this attempt to substitute a promise to pay coin, for coin itself. A demand was created for it by receiving it for loans, and taxes, and currency, contracted and expanded, not according to the specie standard, but according to the demands for credit, and under laws often differing very widely from those which should

regulate currency. The notes representing specie deposits, and used to transfer and offset the balances of trade, had performed a highly useful function, and had interfered with the specie standard of value in no other way than by economizing its use, and in enabling less to discharge the office of payments. If there was a tendency to a contraction of the specie standard, the business of exchange became more active, and thus contributed to keep to a proper level the currency value of the precious metals. If, on the other hand, there had been a tendency to an expansion of the specie medium, which has not existed since about the middle of the sixteenth century, the bullion value of the precious metals would rise, and thus tend to preserve the true standard. But when banks undertook to carry on the business of exchange or offset by paper which represented neither deposits of specie nor actual balances of trade, but which undertook to find either the specie or the bills, founded upon real balances, whenever they were required at a certain place, the whole subject passed from the regulation of the natural laws of trade, and was placed under the management of artificial and empirical rules, which, however ingeniously conceived and skilfully administered, have had the effect to derange often the whole system of exchanges and of commerce in the world. As this paper took the place of specie, the currency value of the precious metals diminished, large amounts were driven into the uses of manufacture, which ought to have been employed as currency, and the great law of nature was thus suspended for a time, which, by increasing the value of specie, would have directed more labor to producing it. If, then, specie enough could be furnished to perform all the offices of circulation, and to banish all paper from the uses of currency, except such as was founded upon an exchange of real values, consisting either in specie or actual balances arising in the operations of trade, who could doubt the beneficial results from such a state of things? The vibrations between the greatest possible contractions and expansions of such a currency, for the period which would embrace the transactions of a generation, would never be such as to produce a tithe of the calamities to which a paper currency has so often exposed us; and commerce would be secured from a source of risk vastly more prolific and dangerous than all those against which insurance offices undertake to provide.

If the preceding views are correct, there is no just cause to apprehend any dangerous expansion of the currency from the increase of the precious metals. The annual production of gold and silver probably does not exceed \$150,000,000; but the interest upon the public debt of Europe alone, at 4 per cent. per annum, would amount to \$326,813,821, and the annual production of the United States is probably at least four times that sum. Indeed there is reason to believe that the value of the property of the world is increasing faster than that of the precious metals, even with the new sources of supply to the latter. Now there can be no danger of an undue expansion of specie currency until the stock is increased beyond the point of which we are speaking, and up to that point such an increase would prove an unmixed blessing. Indeed, no increase of specie can produce an expansion if we should have none but a specie currency until there is enough to take the place of the paper money afloat. In the United States alone the bank notes in circulation in 1850, according to a report from the Secretary of the Treasury, which included returns only from a portion of the banks, amounted to \$131,366,526, and this constitutes but a small part of the paper money of the world. But would any possible increase of the precious

metals supersede paper money, and leave nothing in circulation but the paper of exchange? Unless governments interfered, such might be the effect of a sufficiently large increase of the precious metals. The expense of issuing promises to pay in specie—or, in other words, of issuing bank notes in the usual form—is not measured only, as sometimes asserted, by the value of the paper and printing, but is another form of the great business of exchange, by which banks or persons undertake to transfer and offset the actual balances of trade by means of credit instead of money. When specie is scarce and dear, this business is profitable; but as the former becomes plentiful and cheap, the profits of the latter decline, and dealers will not pay for a promise to furnish specie in a mode which involves a chance of failure, when it is so abundant that they may readily obtain bills drawn upon actual deposits.

The probability is, that the whole amount of the precious metals raised annually, after deducting the quantity lost to the stock of the world by abrasion and other causes, does not amount to the bank note circulation in the United States alone. In 1803 Humboldt estimated the annual loss on plate in Europe alone, from abrasion and other causes, at \$4,500,000. The loss on coin by abrasion was estimated by Lord Liverpool at one per cent. on the guinea, and two per cent. on half-guineas, for fifty years; and in eleven years one-fifth of one per cent. on crowns,  $1\frac{9}{10}$  per cent. on half-crowns, upwards of five per cent. on shillings, and  $3\frac{1}{4}$  per cent. on sixpences. Some idea may thus be formed of the annual wear of the precious metals, which is to be subtracted from the \$150,000,000 which are probably raised in the year. Upon a review of all the considerations which affect the questions submitted to us, there would seem to be no danger from an undue expansion of the standard of value, if we bring into active use both of the precious metals, and if the annual supplies of both were to increase beyond their present annual measure. It is true that none but a calculation of approximation can be made upon this subject. The data are too complicated and uncertain to enable us to make an exact estimate of the values of the specie or of the property of the world. But since the middle of the seventeenth century there is great reason to believe that the value of the specie standard has contracted, and there are some grounds for supposing that in the United States this tendency has not been corrected even by the production of gold in California. The summer of 1851 witnessed a severe pressure in the money market in New York; and an exhibit of the banks of the State of Massachusetts for the year 1851, shows that the proportion of their liabilities for circulation and deposits was to their specie as 13.17  $\frac{7}{10}$  to 1, which is a far greater proportion than was ever known in that State from 1815 to 1851, with the exception of the two years of 1835 and 1836. (See Hunt's Merchants' Magazine of February, 1852, p. 222.)

This state of things was probably brought about, in part, by the appreciation of silver beyond the mint price under our law. The silver coin left us, and stimulated importations from the places where it went. Gold did not immediately replace it in circulation; indeed, for the purposes of small change, it could not; and the banks were thus tempted to issue notes to supply the vacancy in the currency. Had the market and mint prices of silver corresponded in the United States, we should probably have seen nothing of all this. Although it is possible that the first effects of a large influx of specie might be an increase of bank paper, yet this is an evil which the laws of trade would soon correct. Should, however, the present state

of things continue in relation to silver, we shall not only lose the advantages of the more abundant of the precious metals; for the purposes of a standard, but we must lose the specie standard entirely in the smaller exchanges of society. It is doubtful whether the dollar gold piece can maintain its place in circulation; and smaller values in that metal can hardly be used for coins. This vacuum must then be supplied by bank notes of the very worst kind, the notes of smaller denominations. So much is the value of currency affected by the facility with which it may be counted, and its convenience of transportation, that there will always be difficulty in supplying the place of small notes with any thing but silver, or that of large notes with any thing but gold. We require, then, for this reason, the double standard of gold and silver: but, above all, do we require both, to counteract the tendency of the specie standard to contract, under the vast increase of the value of the property of the world. And what harm can arise from any probable increase of the precious metals, if both are allowed to swell the volume of currency? On the contrary, a more beneficial event for the trade, the industry, the moral and political condition of the world, could scarcely be imagined. Of all the great effects produced upon human society by the discovery of America, there were probably none so marked as those brought about by the great influx of the precious metals from the New World to the Old. European industry had been declining under the decreasing stock of precious metals and an appreciating standard of value, human ingenuity grew dull under the paralyzing influences of declining profits, and capital absorbed nearly all that should have been divided between it and labor. But an increase of the precious metals, in such quantities as to check this tendency, operated as a new motive power to the machinery of commerce. Production was stimulated by finding the advantages of a change in the standard upon its side. Instead of being repressed, by having to pay more than it had stipulated for the use of capital, it was stimulated by paying less. Capital, too, was benefited, for new demands were created for it by the new uses which a general movement in industrial pursuits had developed; so that if it lost a little by a change in the standard, it gained much more in the greater demand for its use, which added to its capacities for re-production, and to its real value. Property which had been acquired by the strong arm, and accumulated in violation of the great laws of equity and trade, by an almost insensible transition, was distributed more equally in society. Nature, under the operation of this its great bankrupt law, as if by an invisible hand, loosened the bonds of the debtor, which heretofore time had continually tightened, and distributed to labor, for purposes of re-production and upon equitable terms, capital which distrust and apathy had either locked up or administered with a too sparing hand. New influences arose in society, and a new impulse was given to its movements. In the present stage of the world we may, perhaps, no more expect any event to produce such rapid transformations in society. But we might reasonably look for something like the same consequences from a similar event. Any system, either of violence or law, which distributes property improperly and unjustly, and which gives a false direction to the great stream of productive industry, will, in the end, produce throes and convulsions in the bosom of society. Unless human skill, such as is rarely if ever known, intervenes to give a true direction to affairs, or unless nature interferes, through the silent operation of her laws, to remove inequalities and repair injustice, violence is almost sure to be used to make a change if it

cannot apply a remedy. The recent discovery of vast auriferous deposits on the globe, would seem to mark the approach of one of those great eras in human affairs when the hand of nature is more obvious than that of man in producing changes. But, be this as it may, we may safely act upon conclusions to which we are led, either by a practical or theoretic view of the question; and your committee are not prepared to go further than to provide for a want which experience has demonstrated to exist. They are disposed to adopt nearly the recommendations of the Secretary of the Treasury, and to leave, for a future day, whatever provisions time and experience may prove to be necessary.

To afford the country the benefit, to some extent, of both metals as a standard of value, it is proposed to diminish the quantity of silver in the half-dollar, and coins of smaller denomination, by about 6.91 per cent. The British government have adopted a still greater seignorage, and their experience seems to have proved the efficiency of this measure for furnishing metallic coins in sufficient quantities for the smaller transactions of society. But, if not made a legal tender—and it is not made so in Great Britain, except for small sums—it can only circulate for such purposes. To make it a legal tender at such rates, rates beyond its bullion-value, would debase the standard and expel the gold. To secure the use of a silver coin, in place of small notes, for the minor transactions of commerce, it is proposed to make this coin a legal tender for sums not exceeding five dollars, and to receive it in payment of public dues. This, however, does not secure the full benefit of the use of silver as a currency, unless we were to adjust its legal value to that which it bears in the market; but as no relation between the market values of the two metals has so developed itself as to promise to be permanent, it might be dangerous to attempt at present to disturb the existing law. Whenever the relation between the market and mint values of gold and silver shall promise a reasonable degree of stability, there can be little doubt but that there should be a re-adjustment of the mint-values of these metals. In the mean time, however, the course of our commerce, and the convenience of exchange, would seem to require some new provisions in relation to bullion. Gold has become an article of export—movements of the precious metals from one country to another are now more frequent and active, and these are regulated by the value of the metals, not as coin, but as bullion. For all such purposes it would be a convenience to trade, and a saving of the expense of coinage to government, if the bullion were cast into bars, either of fine metal or of standard fineness, at the option of the depositor, for a moderate compensation. Foreign exchanges are measured in the precious metals by weight: the custom of commerce may, perhaps, establish hereafter a like measure in domestic transactions; and should that ever be done, the legal regulation of this difficult subject will be somewhat simplified.

In adopting a diminution of the amount of standard silver to the extent recommended by the Secretary of the Treasury, your committee have acted not without doubt. So great a diminution in the amount of silver will undoubtedly preserve a supply of coin for the smaller transactions of society; but if it approached more nearly the true bullion value, the silver coin would be much more efficient as a general circulating medium. Indeed, the American coins of a less denomination than a quarter of a dollar would probably be retained in this country, even with their present amount of silver. The expense of coining a given value of silver into the smaller coins

is much greater than into the large; and when coined, the great demand for them gives them a higher currency value than that assigned by law. As a proof of this, the demand for silver for exportation has not operated as yet upon these smaller coins—that is to say, the dime and half-dime, (the quarter, too, has been partially exempted)—whilst it has swept the silver dollar and half-dollar from the country. A greater diminution of the amount of silver is therefore required in the half-dollar, if the object be to save it from exportation, because the mere coinage does not add so much to its value. But still it is desirable to adjust the quantity of silver in the half-dollar as nearly as may be to its bullion value, as compared with the mint price of gold, if this can be made compatible with the object of retaining these coins in the country. The Secretary of the Treasury, in his annual report, has estimated the difference between the mint price of gold and its bullion value, at nearly *two* per cent. Some gentlemen, of large experience and practical knowledge of this subject, in New York, have been consulted, and the difference has been valued from  $2\frac{1}{2}$  to  $3\frac{1}{2}$  per cent. The director of the mint places it at 3 per cent. If, then, the cost of coining silver is  $1\frac{1}{2}$  per cent., the amount charged at the French mint, and if that be something near the additional value given by coinage, the half-dollar and pieces of a less denomination would probably be used as a currency under the natural demands of commerce, even when silver bore not more than  $3\frac{1}{2}$  per cent. premium; that is to say, if these pieces cease to be coined, as the accompanying bill proposes, for anybody except the government, which would limit the supply by the demand for currency. But should this premium continue to advance, the half-dollar would not be exported until the premium covered the 5 per cent. over its present legal value, the additional value given it by its character as a coin here, and the expense of transportation rated, from New York to Liverpool, at about  $\frac{2}{3}$  per cent. for large coin. The probability, therefore, is, that with a reduction of only 5 per cent. in the amount of silver, this coin would not be exported. With this reduction, silver in the smaller coins would bear to gold a ratio of nearly 15.233 to 1, which gives it a greater value than the existing laws of Russia, Holland, and France, in which it bears to gold the respective values of 15.333 to 1, of 15.5 to 1, and of 15.5 to 1. In England it bears a higher value; but there it is used only for tokens, and is not a legal standard except for small sums. The expense of exporting small coins abroad is far greater than, that of exporting bullion or coins of large value. The gold coin exported from this country has consisted principally of the double-eagle; and experience has shown that at a premium of  $3\frac{1}{2}$  per cent., the dime was not exported, owing to the increased value given it by its character of currency and to the greater expense of exportation. This remark applies, of course, to the new dime, and not those which are worn. If it was deemed expedient to use silver only as a token, then it would be safer to adopt a greater measure of diminution than that recommended by the Secretary of the Treasury, so as to accomplish the object with greater certainty. But if it is thought expedient to preserve the double standard, and to readjust it when the relations between the two metals promise to be more permanent, then it is desirable to make no greater deviations from the true value of silver than may be necessary to accomplish the object of retaining a specie currency for small transactions. That this object might be accomplished with a less reduction of the quantity of silver than is now proposed, there is some reason to believe. There is a natural tendency in the two metals

to find a stable relation between their values, which continues, if not from age to age, at least for many years. Thus Mr. Moore, (see Doc. 117, before mentioned, page 50,) an officer of the United States mint, consulted by Mr. Ingham when he made his report on this subject, states that notwithstanding the supply of silver to gold in weight had been for many years as 40 or 50 to 1, yet the price of gold to silver had not varied much from the proportion of 15 to 1. Mr. Ingham remarked on the stability of the ratio between the two in France and England for ten years before his report, and we all know that until recently the proportion fixed by law in 1834, in the United States, preserved the two metals in circulation together. Such ought to be the state of things, reasoning from theory. If in any country silver, as compared with gold, be too low according to the legal standard, it will leave that country for others where it is sufficiently valued, and it will leave the uses of currency for those of the arts if more be given for it in manufactures than at the mints. All this tends to produce an equilibrium by raising the value of the one as currency, and diminishing that of the other as bullion. There are already symptoms of the commencement of that process. The premium on silver (see table C) in New York and London is less than it was in January, 1851, and still less than that of May, 1851, when it bore the greatest premium, being at the rate of 15.460 to 1, which it is to be observed is a lower value for silver than is proposed in the accompanying bill, for silver coins of the smaller denominations. In addition to these considerations, we are to remember that the higher price of silver and the lower price of quicksilver must both stimulate the production of the former.

But notwithstanding these considerations, the committee have determined to adopt the recommendation of the Secretary of the Treasury, which will at least accomplish the end of giving the community a currency of silver tokens, instead of one of bank notes of small denominations. The great measure of readjusting the legal ratio between gold and silver, cannot be safely attempted until some permanent relations between the market values of the two metals shall be established. The ratio of 14.884 to 1, as proposed by the Secretary of the Treasury, has a great recommendation in the fact that it will make the new silver coins of convenient weights, not only for the manipulations of the mint, but for the *money of account* with the residue of the world.

In examining the subject of coinage, another question has pressed itself for consideration. The capacity of coins to perform all the offices of a currency, depends more upon the denomination than has generally been supposed. (See table H.) When different coins are prescribed to a country, those will be most used which are capable of making most payments, and those will make the most payments which can be transported and counted with the greatest convenience. By convenience of transportation is meant not only the facility, but the safety with which they may be carried. By the convenience of counting is meant those which alone, or in combination with others, can make the most payments, and at the same time be most easily and speedily counted. Thus, the smaller the coin, the more payments it is capable of making, and also the more time will it consume to make large payments in them. The larger the coin, the fewer payments it will make, but the greater the economy of time in using them to settle great amounts. We should expect, then, to find that the pieces for which there is a demand in the greatest number, are neither the largest nor smallest.

Thus, of the gold pieces in this country, by far the larger number consists of the half-eagle. In France, the gold piece coined in the largest number is the twenty-franc piece, which, of their coins, is nearest in value to our half-eagle. In Great Britain, the sovereign piece, which approaches still nearer to our half-eagle in value, is in most demand. Of the larger silver coin, we coin most halves, the French most five-franc pieces, the Austrians most rix-dollars. Of the smaller silver coins, we coin most dimes, the English most shillings, (21.8) the French most of the one-franc piece, (18.5) Austria most of the twenty-kreutzer, (16.2) Spain most of the pistareen, (18.6;) thus showing something like an identity of value in the coin which makes most payments and is in most demand. (See table D.) But it is to be observed that the values invested in the different coins, by no means correspond with the number of pieces. This conclusion is also somewhat strengthened by the relative wear of some of the pieces, in regard to which we have information. If of the same thickness and fineness, the greater the wear, the greater the rapidity with which they have circulated. Thus, according to Lord Liverpool, (p. 70, Doc. 117, referred to) in *eleven* years the half-crown loses  $1\frac{9}{10}$  per cent., the shilling five per cent., the sixpence  $3\frac{1}{4}$  per cent. But according to Mr. Moore, (same, page 70) the guinea loses but two per cent. in fifty years, and silver less—meaning silver coin of the larger denominations. It is true that the greater wear of the smaller coins is to be ascribed, in some degree, to their greater superficies in proportion to their weight; but that will not account for the whole of it, as it is to be observed that the shilling piece wears more than the sixpence, because, probably, it is most often used. This great tendency of the small coin to become light, proves that the amount of metal should not be too much diminished, and would also suggest the propriety of a further resort to chemical and metallurgic experience, for the purpose of lessening the loss by abrasion. The considerations of which we have been speaking, also suggest the propriety of attending to the results of experience in relation to the most convenient denominations for counting off payments, either in combination with others, or in single pieces. Instead of the double-eagle, eagle, half-eagle and quarter-eagle, it would be far more convenient to have pieces of one, two, three, five and ten dollars, and to dispense with the double-eagle, which is merely used for bullion. Not only is the superior capacity of these pieces to make numerous and convenient payments demonstrated by theory, but it is proved by experience. Bank notes of almost all denominations have been used, and the numbers which experience has proved to be most convenient are the same with those just mentioned. Following out these views, a provision has been introduced for coining a new gold piece of the value of three dollars. The great capacity of such a piece for making payments, either alone or in combination with the existing gold coins, is so great, (as will be seen by a reference to table II,) that there can be little doubt of the propriety of authorizing this coin. If a two-dollar piece could be substituted for the quarter-eagle, the coinage would be decidedly improved; but the committee have not ventured further than to propose the additional piece.

It will be observed that the bill which accompanies this report, makes these new coins receivable in payment of public dues. There might be danger that such a demand would induce so great a coinage as seriously to depreciate the general currency of the country. But the bill provides that the new coin shall not be struck upon the demand of depositors, but under

the directions of the Secretary of the Treasury, who can thus always limit the amount. Should any further check be necessary, Congress may hereafter define the amounts beyond which such coin should not be receivable for public dues.

The committee have also adopted the recommendation of the Secretary of the Treasury in relation to a seignorage. The mints of this country are likely to become so expensive, and the quantities of the precious metals manufactured in them are already so large, that it would seem to be proper to impose some legal charge upon the manufacture for the purpose of sustaining the mints. The amount of seignorage is a question of some practical difficulty ; but the charge now proposed is somewhat less than that exacted in England or France. In France the charge is one-half per cent. on gold, and one and one-half per cent. upon silver. In England one and one-half per cent. is paid upon gold, and two and one-eighth per cent. on silver. (See table G:) We propose to charge to depositors one-half of one per cent. for both gold and silver ; denying them, however, the right of having the new silver coin struck on their own accounts.

With these views, the accompanying bill is submitted.

## APPENDIX

TABLE A.

The value of all the gold coin in the United States from 1793 to 1841 was	\$29,182,720
During the same period the value of the silver coin in the United States was.....	56,217,185
In France, from 1806 to 1840, the value of the gold coin was.....francs	1,147,644,100
In France, during the same period, the value of the silver coin was.....do..	3,364,612,052
In Great Britain, from 1816 to 1840, the value of the gold coin was.....	£59,764,500
In Great Britain, during the same period, the value of the silver coin was.	11,107,460

(For above see *Manual of Gold and Silver Coins*, by Jacob R. Eckfeldt and William B. DuBois, appendix, p. 203.)

TABLE B.

The following statement was furnished, with much other interesting information, to the chairman of the Committee on Finance, by Mr. George Curtis, of New York:

1. The annual amount of gold gathered in *California* is variously stated at from \$50,000,000 to \$100,000,000. As at present informed, we must consider, I think, that it now reaches at least..... \$60,000,000 with a probability, if we look only at the representations from that quarter, that this amount will annually increase; but, if we take experience in respect to other gold mines as a guide, that it will begin, at no very distant day, to decrease.
2. *From Mexico and South America*.—The discovery of quicksilver in California already adverted to, and the political quiet into which former convulsions have subsided, must augment, it appears to me, the product of silver in these countries. If this condition of things continues, I cannot think that the annual supply of the precious metals from Mexico and South America will be less than..... 50,000,000
3. *From Europe, northern Asia, Australia, &c.*—The amount from Russia is understood to be still large. Australia, from recent accounts, promises to produce gold; but enough is not known to form any reliable ground for an estimate in regard to that region. Perhaps the total of gold and silver from these sources may be stated at..... 25,000,000

The whole annual production may therefore be conjectured to amount to. 135,000,000

But as the estimate of gold annually raised in California, in this table, is \$15,000,000 less than the lowest amount suggested by the Secretary of the Treasury, and the amount of gold produced in Russia was, in 1846, (the last year for which returns have been found,) £3,414,427, and for several years previously had been annually increasing, the whole amount of gold and silver raised annually in the world has been rated, by a conjectural estimate in this report, at..... \$150,000,000

TABLE C.

The following table was furnished by Mr. Thomas P. Kettell, of New York, to the Chairman of the Committee on Finance:

*Table showing the price of silver coins in New York and London, monthly, during the year 1851, and up to this time.*

Date.	NEW YORK.			LONDON.	
	Mexican dollars.	United States half-dollars.	Spanish and Mex-ican quarters.	New dollars. Five-franc pieces.	Silver bars—standard.
January, 1850	13 a 2	1 a 1	— a 1 1/2 dis.	95 a 95 1/2	59 3/4.
January, 1851	4 1/2 a 4 1/2	3 1/2 a 3 1/2	1 a 2 prem.	96 1/2 a 96 1/2	59 1/2
February, 1851	4 a 4 1/2	3 a 3 1/2	1 a 2 "	97 a 97 1/2	59 1/2
March, 1851	4 a 4 1/2	3 1/2 a 3 1/2	1 a 2 "	97 a 97 1/2	59 1/2
April, 1851	4 a 4 1/2	3 1/2 a 3 1/2	1 a 1	97 a 97 1/2	59 1/2
May, 1851	4 a 4 1/2	3 1/2 a 3 1/2	1 a 1	97 1/2 a 97 1/2	59 1/2
June, 1851	4 1/2 a 4 1/2	3 1/2 a 3 1/2	1 a 1	97 a 97 1/2	59 1/2
July, 1851	3 1/2 a 4	3 a 3 1/2	1 a 1	97 a 97 1/2	59 1/2
August, 1851	3 1/2 a 4	3 a 3 1/2	1 a 1	96 a 97	59 1/2
September, 1851	3 1/2 a 4	3 a 3 1/2	1 a 1	96 a 97	59 1/2
October, 1851	3 1/2 a 4	3 a 3 1/2	1 a 1	96 a 97	59 1/2
November, 1851	3 a 4 1/2	3 a 3 1/2	1 a 1	95 1/2 a 96	59 1/2
December, 1851	3 a 4 1/2	3 a 3 1/2	1 a 1	95 1/2 a 96	59 1/2
January, 1852	4 1/2 a 4 1/2	3 1/2 a 3 1/2	1 a 1 1/2	96 1/2 a 96 1/2	59 1/2
February, 1852	3 1/2 a	3 a 3 1/2	1 a 2	96 1/2 a 96 1/2	59 1/2

TABLE D—No. 1.

*Coinage of American gold from the establishment of the government to December 31, 1851, inclusive.*

Rep.	Periods.	Double-eagles.		Eagles.		Half-eagles.		Quarter-eagles.		Dollars.		Total number.		Total value.	
		Pieces.		Pieces.		Pieces.		Pieces.		Pieces.		Pieces.		Dollars.	
1793 to 1837	.....	.....		132,592		3,933,834		902,100		.....		4,968,526		23,250,340 00	
1838	.....	.....		7,200		320,057		54,921		.....		382,181		1,809,595 00	
1839	.....	.....		38,248		160,549		76,214		.....		275,011		1,375,760 00	
1840	.....	.....		47,338		212,772		61,425		.....		321,535		1,690,802 50	
1841	.....	.....		67,631		74,345		21,025		.....		163,601		1,102,097 50	
1842	.....	.....		108,807		131,066		35,908		.....		275,781		1,833,170 09	
1843	.....	.....		250,524		933,083		452,853		.....		1,626,460		8,302,787 50	
1844	.....	.....		125,061		817,655		35,738		.....		978,454		5,428,230 00	
1845	.....	.....		73,653		548,728		110,511		.....		732,892		3,756,417 50	
1846	.....	.....		101,875		547,231		111,709		.....		760,815		4,034,177 50	
1847	.....	.....		1,433,764		1,080,337		192,821		.....		2,706,925		20,221,385 00	
1848	.....	.....		181,334		372,712		41,445		.....		595,491		3,780,512 50	
1849	.....	.....		677,518		236,929		44,459		936,789		1,895,695		9,007,761 50	
1850	.....	.....		348,951		172,032		358,219		611,301		2,801,764		32,081,738 50	
1851	.....	.....		439,328		520,291		1,546,935		3,658,820		8,577,629		92,614,492 50	
		3,713,416		4,023,864		10,071,721		4,046,889		5,206,910		27,072,760		180,289,297 50	

TABLE D—No. 2.

*Coinage of American silver from the establishment of the government to December 31, 1851.*

Periods.	Dollars.		Half-dollars.		Quarter-dollars.		Dimes.		Half-dimes.		Three cents.		Total number.		Total value.	
	Pieces.		Pieces.		Pieces.		Pieces.		Pieces.		Pieces.		Pieces.		Dollars.	
1793 to 1837 .....	1,410,517		87,897,993		5,692,029		12,862,100		14,729,243		.....		122,621,882		48,835,192 00	
1838 .....	.....		3,546,000		832,000		2,197,500		2,290,000		.....		8,865,500		2,315,250 00	
1839 .....	300		3,449,561		491,146		1,743,115		1,329,150		.....		7,213,272		2,038,636 00	
1840 .....	61,005		2,250,608		614,227		2,599,580		2,253,085		.....		7,777,905		1,712,178 00	
1841 .....	173,000		677,000		572,500		3,630,000		1,965,000		.....		7,017,500		1,115,875 00	
1842 .....	184,618		2,969,764		857,000		3,837,500		1,165,000		.....		9,013,882		2,325,750 00	
1843 .....	165,100		6,112,000		1,163,600		1,520,600		1,165,000		.....		10,125,700		3,722,250 00	
1844 .....	20,000		3,771,600		1,261,203		72,500		650,000		.....		5,774,700		2,260,550 00	
1845 .....	24,500		2,683,000		922,000		1,985,000		1,564,000		.....		7,178,500		1,873,200 00	
1846 .....	169,600		4,514,000		510,000		31,300		27,000		.....		5,251,900		2,558,580 00	
1847 .....	140,750		3,740,000		1,102,000		245,000		1,274,000		.....		6,501,750		2,874,450 00	
1848 .....	15,000		3,760,000		146,000		451,500		1,268,000		.....		5,640,500		2,040,050 00	
1849 .....	62,600		3,562,000		340,000		1,189,600		1,449,600		.....		6,552,600		2,109,950 00	
1850 .....	47,500		2,683,000		602,800		2,441,500		1,645,000		.....		7,419,800		1,866,100 00	
1851 .....	1,300		602,750		248,000		1,426,500		1,611,000		6,167,400		10,086,950		774,397 00	
	2,505,790		132,218,076		15,354,502		36,182,005		34,614,473		6,167,400		227,012,341		77,982,408 90	

TABLE D—No. 3.

*Total amount of coinage in pieces, from 1816 to 1840, in Great Britain.*

	Pieces.	Value.
GOLD.		
Double-sovereigns .....	16, 119	£82, 238
Sovereigns .....	55, 468, 389	55, 468, 389
Half-sovereigns .....	8, 527, 681	4, 263, 840
	64, 012, 189	59, 764, 467
SILVER.		
Crowns .....	1, 849, 905	462, 476
Half-crowns .....	31, 438, 484	3, 929, 804
Shillings .....	101, 645, 280	5, 082, 264
Sixpences .....	58, 324, 595	1, 458, 115
Fourpences .....	10, 371, 058	172, 850
	203, 629, 272	11, 105, 509
Three, two, and one penny .....		2, 190

TABLE D—No. 4.

*Amount of coinage in pieces, from 1803 to 1840, in France.*

	Pieces.	Value.
GOLD.		
		<i>Francs.</i>
Forty francs .....	5, 110, 786	204, 431, 440
Twenty francs .....	47, 160, 636	943, 212, 720
	52, 271, 422	1, 147, 644, 160
SILVER.		
Five francs .....	646, 209, 090	3, 231, 045, 450
Two francs .....	28, 523, 804	57, 057, 608
One-franc .....	50, 359, 424	50, 359, 424
Half-franc .....	45, 068, 176	22, 534, 088
Quarter-franc .....	14, 461, 928	3, 615, 482
	784, 627, 422	3, 364, 612, 052

TABLE E.

It is impossible to ascertain accurately the quantity of precious metals existing in the world at the time of the discovery of America; but we may make, perhaps, some approximation towards the amount. Adam Smith, assuming corn to be a more accurate measure of value than even silver for the comparison of prices in distant ages, supposes the increase of specie after the discovery of America to have raised the specie price over the real value

three or four times; a result which, he says, is confirmed by French as well as English experience. (See his *Wealth of Nations*, vol. 1, p. 324.) According to his tables, the average price of wheat for sixty-four years preceding 1764 was £2 0s. 6 9-32d. per quarter; and the average for twelve years between the periods of 1499 and 1560 was £0 10s. 0 5-12d., (see same vol., p. 416 to 419,) making a rise of about four to one; but it is to be remembered that this increase was composed of a rise in the real value, as well as of in the silver price. Take it, however, that this increase was due to the precious metals only, and there must have been at least one-third as much silver then as at the period of which we speak; probably there was more. But if we put it now as amounting to only one-third of what we know to have been taken from the American mines up to 1825, when, according to Mr. Ingham's report, the quantity derived from this last source was estimated at \$6,200,000,000, we should have \$2,066,666,666 as the least probable value of the specie in use in the world when America was discovered. But this is probably far too low an estimate of the quantity. Brogniart estimated the annual produce of the mines of the Old World from 1790 to 1802 at \$2,367,488 of gold, and \$2,681,920 of silver, or about \$5,000,000. Now, it is to be remembered that certainly for more than 2,000 years the precious metals had been raised in the Old World, and often probably with much more activity than at the time for which Brogniart estimated. The Uralian mines themselves were certainly worked in ancient times; and Africa, Asia, and parts of Europe, probably yielded more gold and silver annually, and for long periods before the discoveries of America, than they have done since that era, until very recently. Now, if we were to suppose an annual supply over the world of only \$2,500,000 beyond what was lost by abrasion and waste, we should have in 2,000 years only an accumulation of \$5,000,000,000, a fact the existence of which should not surprise us even if demonstrated, when we reflect that, since the use of the bill of exchange, a dollar of specie would effect as many more payments as it would have done at a period when the means of communication and transportation were so slow and imperfect.

TABLE F.

[This statement was furnished the chairman of the Committee on Finance by Mr. J. C. G. Kennedy, superintendent of the census.]

By an investigation of the statistical tables of the different countries in Europe, framed by Moreau de Jonnes, the following table has been constructed, showing the individual increase, and the extent of the period for doubling the number of inhabitants:

	Annual increase.	Period of doubling.
	<i>Inhabitants.</i>	<i>Years.</i>
Belgium.....	1 to 60	41
Holland.....	1 to 62	42
Sardinia.....	1 to 62	42
Norway.....	1 to 73	50
Ireland.....	1 to 72	50
Austria.....	1 to 74	52
Poland.....	1 to 74	52
Scotland.....	1 to 82	57
Spain.....	1 to 82	57
Sweden.....	1 to 85	59
Great Britain and Ireland.....	1 to 90	62
Italy.....	1 to 94	66
Prussia.....	1 to 103	70
Naples.....	1 to 108	75
England.....	1 to 112	78
Germany.....	1 to 116	79
Denmark.....	1 to 120	83
Russia.....	1 to 137	95
Switzerland.....	1 to 140	97
Portugal.....	1 to 140	97
France.....	1 to 170	118

TABLE G.

*Extract from a report of Mr. Abbot Lawrence, minister to Great Britain, to the Secretary of State of the United States, of February 19, 1851.*

"The gold coins of England are eleven-twelfths fine, and those of France nine-tenths fine, being so nearly alike as to prevent melting and assaying. When gold is taken to the French mint to be coined, the mint retains nine francs per kilogramme, and when silver is so taken, three francs per kilogramme is retained, which alters the relative proportions from 3100 : 200 (or  $15\frac{1}{2} : 1$ ) to 3091 : 197 (or  $15.69 : 1$ .) The standard of silver coin in England consists of thirty-seven parts of pure silver and three parts alloy. Thus twelve ounces of standard silver contains eleven ounces and two pennyweights of pure silver, and eighteen pennyweights of copper; and the proportion between this and standard gold is as 14.105 to 1."

*Extracts from a letter from the Director of the United States mint, dated March 3, 1852, to Mr. William L. Hodge, Assistant Secretary of the Treasury.*

"The expense of coinage at this mint during the past year, exclusive of the cost of refining or parting, (which is paid by the depositors under the present laws,) was about 42-100ths of one per cent. on a coinage of \$52,689,878, of which nearly all was in gold. At New Orleans, on a coinage of about \$10,000,000, the per-centage I estimate, on data not entirely reliable, at 17-100ths."

"In England the gold is coined at one-half per cent., the silver at two and one-eighth—these charges being, however, paid by government, and not by depositors. At the mints in British India, the seignorage is two per cent. on both gold and silver.

"Looking merely to the support of the present establishments, I should estimate a charge of one-half of one per cent. on the coinage of gold as sufficient for their support, in view of the deposits probably to be received. If mints are established in California and New York, this per-centage would, no doubt, be too small, since the execution of the same amount of coinage, divided among several mints, is more expensive than if performed at one establishment."

TABLE H.

[The following was prepared by Mr. Blodgett, assistant of the Smithsonian Institute, at the request of the chairman of the Committee on Finance:]

The several payments within one hundred dollars which can be made by each of the coins \$20, \$10, \$5, and  $\$2\frac{1}{2}$ , are as follows:

\$20 piece, (\$20, \$40, \$60, \$80, &c.).....	5
10 piece, (\$10, \$20, \$30, \$40, \$50, &c.).....	10
5 piece, (\$5, \$10, \$15, \$20, \$25, &c.).....	20
$2\frac{1}{2}$ piece, ( $\$2\frac{1}{2}$ , \$5, $\$7\frac{1}{2}$ , \$10, &c.).....	40

The distinct payments by the first and second are identical with those made by the second alone, as—

\$10, \$20, \$30, \$40, &c.....	10
By the first, second, and third—	
\$5, \$10, \$15, \$20, \$25, &c.....	20
By the first, second, third, and fourth—	
$\$2\frac{1}{2}$ , \$5, $\$7\frac{1}{2}$ , \$10, $\$12\frac{1}{2}$ , &c.....	40

The whole number of payments by all these in undivided numbers is but twenty, the  $\$2\frac{1}{2}$  coin adding fractional payments only to those made by the first three. The proportion paid by these coins is therefore but 20-100ths of possible payments either in whole or fractional numbers.

A \$3 coin would pay—

\$3, \$6, \$9, \$12, \$15, &c.....	33
Of which \$3, \$6, \$9, \$12, \$18, &c., are new.....	27

The first four, with the \$3 coin, added in various combinations, would pay, in new payments, as follows:

\$3, \$6, \$8, \$9, \$11, \$12, \$13, \$14, \$16, \$17, \$18, \$19, \$21, &c..... 76  
And with the twenty previously paid..... 96  
Leaving unpaid the numbers \$1, \$2, \$4, \$7, 4-100ths, which may be readily paid by exchange.

The several payments within \$10 which may be made by coins less than \$1. and including \$1, are as follows, (in cents, making 1,000 payments:)

By \$1 00..... 10  
By 50..... 20—adding 50 cents, \$1 50, &c..... 10  
By 25..... 40—adding 25, 75 cents, \$1 25, &c..... 20  
By 10..... 100—adding 10, 20, 30, 40, 60 cents, &c..... 60  
By 5..... 200—adding 5, 15, 35, 45, 55, 65, 85 cents, &c..... 80

By combining the ten-cent piece with the higher coins in the same series, all the payments made by the five-cent piece are readily made, except two, (5, 15.)

And the sum of payments in this way by the first four is..... 198  
And by the first four with the five-cent piece..... 200  
By the three-cent piece alone there are made..... payments.. 333  
Of which are new 3, 6, 9, 12, 18, 21, 24, 27, 33 cents, &c..... 265  
By combination with other coins it pays..... 996

Or all possible payments except four, (1, 2, 4, 7 cents,) which may readily be paid by exchange.

*Payments in \$100; assumed number 100.*

	By repeating the coin.	By this & higher coin.	New payments.	Proportion of each coin.	Added by exchange.
Twenty-dollar piece.....	5	5	5	5-100	0
Ten-dollar piece.....	10	10	5	5-100	0
Five-dollar piece.....	20	20	10	10-100	0
Two-and-a-half-dollar piece.....	40	40	20	20-100	*0
Sums.....			40	20-100	0
Remaining unpaid.....			50	80-100	0
Add three dollars.....	32	96	76	76-100	4
With the last, directly and by exchange..			100	100-100	0

*Payments in \$10; assumed number 1,000.*

	By the coin alone.	With other coins.	New payments.	Separate proportion.	Combined proportion.	Payments added by exchange.
One-dollar piece.....	10	.....	10	10-1000	.....	0
Fifty-cent piece.....	20	20	10	10-1000	20-1000	0
Twenty-five-cent piece.....	40	40	20	20-1000	40-1000	0
Ten-cent piece.....	100	198	158	100-1000	198-1000	†2
Five-cent piece.....	200	200	2	200-1000	2-1000	0
Three-cent piece.....	333	996	796	333-1000	996-1000	†4

\*In half-dollar divisions.  
†Many of the payments made by combination may more readily be made by exchange.

The series of denominations above \$1 is mainly decimal, and adapted to computation rather than currency. Its terms cannot add to the range of payments by combination, and gain nothing by exchange of pieces. Its value for currency seems, therefore, to require the introduction of another denomination for this purpose.

*Convenience of payment* requires a regularly increasing number of the higher coins.

*Retention of the coin*, or the less number of the large payments in which these are required, which will be made in a given time, adds more to this increase of demand.

*Frequency* of the smaller payments and adaptation to the special denominations now used, or that may be introduced, renders the demand disproportionately great and irregular for the lower coins.

The adaptation of gold coinage to the intrinsic want within its range must be regarded as incomplete; the supply of bank notes and silver in the same range is very variable: and for these reasons, no determinate ratio for present or prospective purposes can be given as the basis of their issue.

[No. 151.]

LEGATION OF THE UNITED STATES,  
London, December 31, 1851.

SIR: I had the honor to address you in my despatch No. 101, on the 19th February last, suggesting some changes in our system of coinage. Believing that this question will be brought forward in Congress during its present session, I have thought it might perhaps be of some service to communicate further with you on the subject in connexion with that despatch. The silver coinage of England is affected by a seignorage of about ten per cent.; a pound troy being coined into sixty-six shillings, or an ounce into five shillings and sixpence; while the price is rarely more than five shillings per ounce. The sixpence per ounce at which it circulates in England, of course prevents its exportation. Silver in England is not a legal tender to a greater amount than forty shillings, and the quantity necessary for small exchanges is determined by the government, which does not coin it as it does gold, for any one depositing bullion. In the United States the standard of silver is put too high in proportion to gold, and cannot, I think, be maintained. The following are the relative proportions of gold and silver, as fixed by some European governments in their coinage:

England	about	14.159	silver	to	one	of	gold.
Russia	"	15.333	"	"	"	"	"
Holland	"	15.5	"	"	"	"	"
France	"	15.5	"	"	"	"	"

In my last despatch I referred to the fact that the gold coins of France are not melted and assayed in the mints of England, and *vice versa*, to the similarity of the French and English standards. I learn, however, that it is not referable to that fact, but to that fact that in each country there is a uniformity in the quality of its own coins.

Our coins are melted both in France and in England.

The adoption of the standard of either of these countries would not, of itself, prevent the necessity for this; since it does not arise from a disparity of standard, (which, within certain limits, is a matter of indifference) but from a want of constant conformity to the standard adopted. It would appear from a recent trial at the bullion office, in London, that there is a want of conformity between the coins of the parent establishment and those of the branch mints in the United States. Twelve pounds weight of United States gold coins of the Philadelphia mint, was compared with a like weight from the New Orleans branch mint, and a difference found, on assay, of an eighth of a grain, which is equivalent to 1.125 per ounce. And I have before stated, that the United States eagles and half-eagles have been found by the Bank of England to be sometimes reported by assayers as better than standard.

In my former communication, I suggested the expediency of adopting the English standard, in order to prevent melting our coin. I was not then aware that, in consequence of the causes I have stated above, they do not generally command confidence in Europe.

The wear of coins depends on the nature of the alloy, and the character of the engraving and milling.

The quantity of gold turned out from California has been greater this year than was anticipated; and from all accounts, large quantities are likely to be supplied for some time. The discovery of gold in Australia has also caused many persons to believe that the alteration in the relative value of gold

and silver will yet be much greater. It should, however, be borne in mind that the discovery of quicksilver, or cinnabar, in California, must stimulate the production of silver, as the price of quicksilver has already been materially reduced. Before the revolt of the South American colonies, the government of the mother country sold quicksilver at fifty dollars per quintal in the interior; but since the declaration of their independence, the monopoly under which the Spanish quicksilver mines have been held, caused it to rise as high as one hundred and thirty dollars a quintal. This at last drove the less fruitful silver mines out of the market, as they could no longer be worked at a profit, and artificially restricted the supply of silver. The effect of the recovered cheapness of an article so indispensable in its extraction, may be perhaps now seen in the almost daily increasing supplies of silver from South America, and the large quantities of silver said to have been lately found in the northern parts of California. These considerations, together with the spur which will be given the silver mining by the increasing demand, give reason to suppose that it may be some time before any very great change may take place in the relative value of the two metals, if it take place at all.

These suggestions do not, however, change my opinion upon the expediency of having but one standard. I think it will hereafter be found a source of great inconvenience to attempt to maintain more than one, which should be of gold, and the silver coinage adapted to it, in accordance with the suggestions contained in my despatch No. 101.

The above considerations lead to the conclusion that whatever may be the increase in the precious metals, their fitness as a standard of value would be unaffected, except in their exchange power with other things; and any effect upon that power must be so gradual, as to affect none but debts contracted for so long periods as to be out of all commercial considerations. Doubtless it would affect the debts of indebted countries funded for a long period, and the interests of those concerned in them.

I am indebted for many of the foregoing facts to the manager of the bullion office, and shall be much gratified if they prove useful to the government. I close with renewing the suggestion that too much care cannot be taken to insure perfect uniformity in our coinage of gold, and that an immediate remedy should be applied to correct the existing evil.

I have the honor to be, sir, very respectfully, your obedient servant,

ABBOTT LAWRENCE.

Hon. DANIEL WEBSTER,

*Secretary of State, Washington, D. C.*

[No. 101.]

LEGATION OF THE UNITED STATES,

*London, February 19, 1851.*

SIR: You gave me to understand a few days since, in a private note, that our government would be glad to receive suggestions upon the subject of the coinage of the United States, in order that measures may be taken to retain in the country a sufficient quantity of silver coins to furnish change for its daily business transactions. I have never given the subject much thought, and therefore do not feel competent to do more than make suggestions for your consideration.

I have thought it would be wise to abolish the double standard of value

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now existing in the United States, and adopt but one—and that of gold. The value of gold at our mint, compared with silver, is about three per cent. higher than that of France. For example, it stands in France at  $15\frac{1}{2}$  to 1; whereas at our mint it stands at 16 to 1. It follows, therefore, that during an adverse balance of trade, silver will be at a premium, and will be the first to be shipped. It does not appear to me to be possible to maintain permanently a double standard, without often having one or the other of the two metals at a premium, as the supply of one or the other will fall short of the proportions established at the mint.

The gold coins of England are eleven-twelfths fine, and those of France nine-tenths fine—being so near alike as to prevent melting and assaying. When gold is taken to the French mint to be coined, the mint retains nine francs per kilogramme; and when silver is so taken, three francs per kilogramme is retained:—which alters the relative proportions from 3100 : 200 (or  $15\frac{1}{2}$  : 1) to 3091 : 197, (or  $15\frac{5}{6}$  to 1.) The standard of silver coin in England consists of thirty-seven parts of pure silver and three parts alloy. Thus twelve ounces of standard silver contain eleven ounces two pennyweights of pure silver, and eighteen pennyweights of copper; and the proportion between this and standard gold is as  $14\frac{1}{6}\frac{5}{6}$  to 1.

If our gold coin were brought to the same standard as the English, great expense would be saved in the transmission of coin from one country to the other. Being of the same fineness, it would be weighed merely, and not re-coined, as at present. I was told at the British mint, a year since, that considerable quantities of American coin had been assayed and re-coined from time to time, and had not been always found to come up to our own standard. I now learn, from a private source, that the gold lately coined in the United States has been assayed in Paris, and found to be nearly three-eighths of one per cent. above our mint standard. I have little doubt that both statements are true; and I mention them that the masters of our mints may be careful in their coinage. They cannot show too much care. Our coin should be as exact as any in the world. I would therefore suggest the expediency of bringing our gold coin to the standard of France or England. The latter I think is preferable, as we have much more intercourse with England and her colonies than we have with France: besides, the pecuniary consideration is of some consequence, as the wear of the British standard is less than that of the French.

If it should be thought wise to abolish the double standard—(and upon this point I have little doubt)—I should suggest the coinage of silver tokens with ten or twelve per cent. alloy, which shall be made a legal tender for any sum not exceeding five dollars, *and which the government shall be always bound to redeem in gold on demand.* The issue of such tokens would save the country from inconvenience for the want of silver change. They would furnish a sufficient circulation for the necessities of the community—they would be prevented from depreciation at home by being redeemable in gold; and they would not be shipped, because their value in Europe would be less than in our own country.

These tokens should not contain less than ten per cent. alloy. In this country, when silver was 4s. 11½d. per ounce, the difference was nearly eleven per cent.; whereas now, in consequence of the recent changes, the difference is only a little above seven per cent. Unless a wide margin were adopted, further changes perhaps would have to be made from time to time, as a continued influx of gold from California might produce a rapid depression.

Counteracting causes may intervene to change the relative value of gold and silver. I notice that large quantities of quicksilver are already produced in California, which, as it forms so important an element in the production of silver, may greatly increase the quantity and reduce the value of this metal. Quicksilver has been hitherto almost a monopoly in the hands of a few persons, who could obtain their own prices.

In case gold should continue to be abundant in California, and sums to the amount of forty millions annually taken from that State for three or four years to come, *with a prospect of a continuance of a large supply*, then the standard of value may be materially reduced; and the United States, Great Britain, and France, and doubtless every country in Europe, would be forced to conform to it. In this case the debtor would possess, whether justly or unjustly, a very great advantage over the creditor.

I am not, however, well enough acquainted with the resources of the gold regions of California, to form an opinion upon the quantity of gold that may be expected from that country. I have, indeed, been impressed with the idea that the world can take a very large amount of gold, without materially affecting the standard of value; and that before the world shall really be surfeited with this precious metal, it will either give out in California, or the cost of obtaining it will be so great as not to tempt laborers to leave other employments for that of digging gold. It often happens that when the hopes of mankind are strongly stimulated, they adopt measures founded rather upon those anticipations than realities, and sometimes far in advance of the latter.

I have the honor to be, sir, very respectfully, your obedient servant,  
ABBOTT LAWRENCE.

Hon. DANIEL WEBSTER,  
*Secretary of State, Washington, D. C.*

